

Author Index to Volume 18

Bale, Christopher W., 147
Bastow, B. D., 93, 127, 295

Ecer, G. M., 55
Erdos, E., 187

Ficalova, P. J., 19
Fryte, E. M., 83

Gnanamoorthy, J. B., 315

Hindam, H., 245
Hirth, J. P., 285

Khanna, A. S., 315

Labun, P. A., 27

Meier, G. H., 55
Melancon, Jacques, 147

Nowok, J., 1

Palmer, I., 295

Rahmel, A., 87, 195
Rapp, R. A., 285
Rolls, R., 115

Sauer, J. P., 285
Schorr, M., 187, 195
Schmidt, M., 187, 195
Shatynski, S. R., 163
Shida, Y., 193, 127
Singh, R. B., 55
Smith, G. M., 229
Stewart, S. F. C., 163
Stott, F. H., 93, 127

Tinker, M., 27
Trimm, D. L., 229

Wagner, J. B., Jr., 41
Whittle, D. P., 93, 127, 225, 245, 295
Wood, G. C., 93, 127, 295
Wu, W. T., 187

Yagi, H., 41
Young, D. J., 229

Subject Index to Volume 18

- Adhesion of protective scales, 245
Alumina scales, keying mechanism, 1
- B-1900, hot corrosion, 163
- Carburization kinetics, heat-resistant steels, 229
Chemical diffusion in Ni_3S_2 , 41
C-H-O system, gaseous equilibrium, 147
Coal combustor deposits, hot corrosion of B-1900, 163
Cobalt, sulfidation-oxidation, 19
Creep, effect of on oxidation of Fe-Si alloys, 115
 Cr_2O_3 formers, effect of applied oxide powders, 55
- Defect mobility in $\text{Fe}_{1-\delta}\text{S}$, 83
- Electrical conductivity of Ni_3S_2 , 41
Electrode potential, effect on corrosion in sulfate melts, 195
- FeCrAlY alloys, mechanism of scale pegging, 285
 $\text{Fe}_{1-\delta}\text{S}$, defect mobility in, 83
Ferritic steels, postbreakaway oxidation, 115
Fluidized bed, hot corrosion in, 163
- Gaseous equilibrium, C-H-O system, 147
- Heat-resistant steels, carburization, 229
Hot corrosion, B-1900, 163
- Intergranular oxidation, morphology in Ni-Al alloys, 127
Intergranular oxidation, preferential in Ni-Al alloys, 93
- Mechanism of keying, alumina scales, 1
Microstructure of protective scales, 245
Morphology of intergranular oxidation in Ni-Al, 127
- NaCrS_2 , formation of during corrosion of Ni-base superalloys in sulfates, 187
Nickel-aluminum alloys, intergranular oxidation, 93
Nickel-aluminum alloys, morphology of internal oxidation, 127
Nickel-base superalloys, corrosion in sulfate melts, 187
Nickel-manganese alloys, oxidation, 295
Nickel, sulfidation-oxidation, 19
- Pegging of scales, alumina, 1
Plasticity of alumina scales, 1
Postbreakaway oxidation of ferritic steels, 315
Protective scales, microstructure and adhesion, 245
- Sulfate melts, effect of electrode potential on corrosion, 195
Sulfate melts, reaction of Ni-base superalloys, 187
Sulfates, reaction between metals and sulfates, 19
Sulfidation-Oxidation of Ni and Co, 19
- Transmission electron microscopy of scales, 27
Transverse scale sections, TEM of, 27
Turbine alloys, corrosion in sulfate melts, 195

Instructions to Contributors

1. Manuscripts should be sent to:
Prof. D. L. Douglass
Materials Department
Room 6531, Boelter Hall
University of California at Los Angeles
Los Angeles, California 90024
2. Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. A statement transferring copyright from the authors (or their employers, if they hold the copyright) to Plenum Publishing Corporation will be required before the manuscript can be accepted for publication. The Editor will supply the necessary forms for this transfer. Such a written transfer of copyright, which previously was assumed to be implicit in the act of submitting a manuscript, is necessary under the new U.S. Copyright Law in order for the publisher to carry through the dissemination of research results and reviews as widely and effectively as possible.
3. Type double-spaced, and submit the original and two copies (including, where possible, copies of all illustrations and tables).
4. An abstract of 150 words or less is to be provided.
5. A list of 4–5 key words is to be provided directly below the abstract. Key words should express the precise content of the manuscript, as they are used for indexing purposes, both internal and external.
6. Illustrations (photographs, drawings, diagrams, and charts) are to be numbered in one consecutive series of Arabic numerals. The captions for illustrations should be typed on a separate sheet of paper. Photographs should be large, glossy prints, showing high contrast. Drawings should be prepared with india ink. Either the original drawings or good-quality photographic prints are acceptable. Identify figures on the back with author's name and number of the illustration.
7. Tables should be numbered and referred to by number in the text. Each table should be typed on a separate sheet of paper.
8. References should be made by using superscript Arabic numerals, and the full references should be given in a list at the end of the paper. For maximum clarity, abbreviations should be avoided in the references. Whenever a book is cited, the number of the relevant chapter should be given.
9. In general, *Oxidation of Metals* follows the recommendations of the American Institute of Physics in their *Style Manual*, and it is suggested that contributors refer to this publication.
10. **The journal makes no page charges.** Reprints are available to authors, and order forms are sent with proofs.

OXIDATION OF METALS

Vol. 18, Nos. 5/6

December 1982

CONTENTS

Carburization Kinetics of Heat-Resistant Steels <i>G. M. Smith, D. J. Young, and D. L. Trimm</i>	229
Microstructure, Adhesion, and Growth Kinetics of Protective Scales on Metals and Alloys <i>H. Hindam and D. P. Whittle</i>	245
Oxidation of Iron-Manganese-Aluminum Alloys at 850 and 1000 °C <i>J. P. Sauer, R. A. Rapp, and J. P. Hirth</i>	285
Oxidation of Nickel-Manganese Alloys in the Temperature Range 873-1273 K <i>B. D. Bastow, I. Palmer, D. P. Whittle, and G. C. Wood</i>	295
Postbreakaway Oxidation Kinetics of Two Ferritic Steels <i>A. S. Khanna and J. B. Gnanamoorthy</i>	315
Announcement	331
Author Index to Volume 18	333
Subject Index to Volume 18	335